

WHAT IS CLAIMED IS:

1. A pilot control valve, comprising:

a divided valve housing;

at least one axially adjustable control piston arranged in the divided valve housing for actuating a valve seat arrangement to switch compressed air flow between external connections;

at least one electromagnetic pilot valve operatively arranged to axially adjust positions of the control piston, the pilot valve being housed in a pilot valve housing part of the divided valve housing that is connected with a relay valve housing part of the divided valve housing;

a multiple-bend pressure compensation channel for bleeding a pressureless valve-internal hollow space, the pressure compensation channel being formed in a wall area of a control chamber in the divided valve housing, the pressure compensation channel having an exterior outlet opening and a channel section;

a covering hood arranged on the divided valve housing, the covering hood protecting the exterior outlet opening from external water influences; and

an exchangeable pressure compensation element provided for the channel section close to the pressureless valve-internal hollow space.

2. The pilot control valve according to claim 1, wherein the pressureless valve-internal hollow space provides an electronic space in which an electronic unit is arranged for controlling the at least one pilot valve.

3. The pilot control valve according to claim 2, further comprising:
an electric connector arrangement for connecting the electronic unit; and
wherein the covering hood covers the electric connector arrangement.

4. The pilot control valve according to claim 1, wherein the pressure compensation channel is cast directly into the divided valve housing.

5. The pilot control valve according to claim 1, wherein the pressure compensation channel is a drilled channel in the divided valve housing.

6. The pilot control valve according to claim 1, further comprising:
a substantially ring-shaped sealing element; and
wherein the relay valve housing part and the pilot valve housing part have a common connection plane and are fastened to one another in a releasable and pressure-sealed manner via the substantially ring-shaped sealing element.

7. The pilot control valve according to claim 6, wherein the pressure compensation channel has the exterior outlet opening arranged in the relay valve housing part and extends via an opening in the ring-shaped sealing element inside the pilot valve housing part to the pressureless valve-internal hollow space.

8. The pilot control valve according to claim 7, wherein the pressure compensation channel comprises:

a transverse channel section originating from the exterior outlet opening and leading into a center wall area of the relay valve housing part;

a bore extending from the transverse channel section in a direction of the pressureless valve-internal hollow space, the bore leading into a curved recess in an area of the sealing element, which curve recess extends in the common connection plane and which changes by way of the opening in the sealing element to a channel section; and

wherein the channel section is formed in the pilot valve housing part and leads into the pressureless valve-internal hollow space.

9. The pilot control valve according to claim 6, wherein the pressure compensation element is a Teflon pellet inserted directly into the opening of the sealing element.

10. The pilot control valve according to claim 1, wherein the pilot control valve is an electropneumatic control valve for a pneumatic braking system of a vehicle.

11. A pilot control valve, comprising:

a divided valve housing in which is formed a control chamber and a pressureless valve-internal hollow space;

a covering hood arranged on the valve housing;

a pressure compensation channel having multiple bends for bleeding the pressureless valve-internal hollow space, the pressure compensation channel being formed in a wall area of the control chamber of the valve housing and has an outlet opening and a channel section;

an exchangeable pressure compensation element arranged in the channel section of the pressure compensation channel; and

wherein the outlet opening of the pressure compensation channel is arranged behind the covering hood.

12. The pilot control valve according to claim 11, further comprising:

an electric connector arrangement provided for the pilot control valve; and

wherein the covering hood also covers the electric connector arrangement.

13. The pilot control valve according to claim 11, further comprising:

a substantially ring-shaped sealing element; and

wherein the relay valve housing part and the pilot valve housing part have a common connection plane and are fastened to one another in a releasable and pressure-sealed manner via the substantially ring-shaped sealing element.